Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

STATEMENT OF BASIS

Chevron USA Inc
Fourchon Treating Facility
Leeville, Lafourche Parish, Louisiana
Agency Interest Number: 3051
Activity Number: PER20080001
Proposed Permit Number: 1560-00010-V5

I. APPLICANT

Company:

Chevron USA Inc. Fourchon Treating Facility 935 Gravier St New Orleans, Louisiana 70112

Facility:

Chevron USA Inc 10 Mi S of Leeville, Lafourche Parish, Louisiana Approximate UTM coordinates are 773.21 kilometer East and 3222.86 kilometer North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS

Fourchon Treating Facility is an oil and gas production facility began operation in 1997. It is currently operating under Permit No. 1560-00010-V4, issued December 22, 2003.

The facility submitted timely renewal application.

III. PROPOSED PROJECT/PERMIT INFORMATION

Proposed Permit

A permit application and Emission Inventory Questionnaire were submitted by Chevron USA, Inc. in June 6, 2008 requesting a renewal and modification of the Part 70 Operating permit. Additional information dated July 24, 2008 was also received.

Chevron USA, Inc. proposes to modify the facility as follows:

Route the overhead vents on the two Chemelectric treaters and on Heater Treaters 5&6 to the fuel gas system.

- Add three small tanks (T-WM1, T-WM2 and T-WM3) that receive the skimmed oil from the WEMCO separators.
- Update emission calculations by using updated factors from AP-42 when available.
- Determine the emissions at each oil tank based on 2005 lab data.
- Calculate water handling system emissions using WATER9 and current water analyses.
- Measure the vent rate from the No. 1 Chemelectric unit along with the predicted vent gas composition to determine the uncontrolled vent emissions from the Chemelectrics unit.
- Determine the composition of the gas based on Tanks 4 and 44.

Permitted Air Emission

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	1.52	1.58	+0.06
SO ₂	0.11	0.18	+0.07
NO _X	30.30	31.25	+0.95
CO	38.74	39.37	+0.63
VOC	16.29	37.79	+21.50

VOC LAC 33:III. Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
1,3-butadiene	-	0.01	+0.01
2,2,4-trimethylpentane	-	0.14	+0.14
Acrolein	-	0.05	+0.05
Acetaldehyde	-	0.10	+0.10
Benzene	0.13	2.84	+2.75
Ethyl benzene	0.002	0.17	+0.168
Formaldehyde	0.50	0.49	-0.01
n-Hexane	0.30	2.80	+2.50
Xylene	0.012	1.72	+1.71
Toluene	0.06	1.81	+1.75
Total	1.01	10.13	+9.12
Other VOC			28.67
Total VOC			37.79

IV REGULATORY ANALYSIS

This permit is reviewed for compliance with 40 CF 70, the Louisiana Air Quality Regulations. Prevention of Significant Deterioration (PSD), New Source Performance Standards (NSPS), Compliance Assurance Monitoring Plans (CAM), and National Emission Standards for Hazardous Air Pollutants (NESHAP) do not apply.

Louisiana Air Quality Regulations and NSPS

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirement Section oh the draft permit, or Table 2 of the Air Permit Briefing Sheet. Similarly, the monitoring, Reporting, and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit, or explained in Table 2 of the Air Permit Briefing Sheet.

NSPS Subpart IIII for IC Engines does not apply because they were constructed prior to July 11, 2005 and have not been modified since this date.

Prevention of Significant Deterioration/Nonattainment Review

This facility is located in an attainment area and is not a major source as defined in PSD rules. Therefore, PSD and Non-attainment New Source Review do not apply.

MACT Requirements

N/A

Air Quality Analysis

N/A

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

N/A

VI. PERIODIC MONITORING

N/A

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H_2S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_X) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH_4) , Ethane (C_2H_6) , Carbon Disulfide (CS_2)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.